Recombinant BMS1 protein (His tag)

Catalog Number	542687
Synonyms	Ribosome assembly protein BMS1 homolog
Species	Human
Expression System	E. coli
Accession	Q14692
Molecular Weight	Predictes a molecular mass of 46.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	1-398
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-398 aa (Q14692) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Ribosome biogenesis protein BMS1 homolog (EC 3.6.5.-) fragment (amino acids 1-398) from Homo sapiens. This high-purity fragment includes the complete Bms1-type G domain, making it an ideal tool for investigating GTPase activity and ribosome assembly mechanisms in vitro. The full-length Ribosome biogenesis protein BMS1 homolog is a GTPase essential for 40S ribosomal subunit synthesis and pre-ribosomal RNA processing at sites A0, A1, and A2. It regulates ribosome biogenesis by controlling RCL1 access to pre-ribosomes through GTP-dependent binding and conformational changes, facilitating RCL1 nuclear import and substrate interaction. BMS1 is localized in the nucleus and nucleolus, underscoring its critical role in ribosomal maturation and cellular protein synthesis.